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AUTHOR Bogaards, Paul
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ABSTRACT

Three influences on second language learning, one individual (intelligence) and two sociocultural (social class and social context) are discussed. All three factors are seen as difficult to measure and resistant to change through deliberate educational policy action. Each is defined, particularly in relation to the language learning situation. Research on measurement of their effects is reviewed briefly, and several models are discussed. An alternative model is then described, postulating four types of relationships among these factors and language learning success: direct influence of intelligence and attitude on outcomes; interdependence of teaching techniques and student characteristics; qualitative influence of teaching activities on learning outcomes; and feedback between teacher and learner. Contains 17 references. (MSE)

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INTELLIGENCE, SOCIAL CLASS AND SOCIAL CONTEXT - MEASURABLE EFFECTS ON SUCCESS IN FOREIGN LANGUAGE LEARNING AT SCHOOL

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by

Dr Paul BOGAARDS
Faculté de Lettres - Université de Leiden
Van Wijkplaats 2 - Postbus 9515 - 2300 RA Leiden / Pays-Bas

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Intelligence, social class and social context - measurable effects on success in foreign language learning at school

At first sight, the reader may be surprised by the combination in one title of the three factors mentioned here. They are, in fact, quite different from one another, with intelligence being a strictly personal and individual characteristic, while the other two are social in nature, although social class may have considerably more individual overtones.

In spite of these differences, however, some similarities do emerge quite quickly. As intelligence, social class and social context are complex concepts which do not lend themselves to straightforward, undisputed definitions, they are all particularly difficult to measure. Moreover, they are unchanging factors which seem virtually immune to any deliberate policy action by the authorities or educationalists.

On the other hand, the fact that they are mentioned together here without a whole range of other factors which could also have measurable effects on foreign language learning at school might cause us to wonder what led to this choice. This brings us to more general questions concerning all the various factors which might have some kind of impact on a given educational outcome and the possible interaction between these factors.

In this contribution, I shall begin by describing the three concepts mentioned in the title and studying their key aspects in relation to foreign language learning at school, whose main aim is, of course, for the pupils to achieve a specific level of communicative skills. I shall then discuss some integrated models designed to give an overview of all the factors which help to explain the results achieved by the pupils.

1. Some factors in foreign language learning at school: intelligence, social class and social context

1.1 Intelligence

Like electricity, intelligence is one of those concepts which, although apparently everyday and familiar, actually remain almost complete mysteries to us. In this connection, it should first be noted that a distinction is often made between three categories when discussing intelligence, ie: category A, an individual's actual or intrinsic intelligence; category B, the intelligence an individual shows in his or her behaviour; and category C, intelligence as measured in intelligence tests (cf Pidgeon 1970: 20-25).

While category A is a characteristic or natural ability which cannot be studied directly, category B involves behaviour, and, as such, can be observed and could therefore be studied. However, as it is relatively difficult to follow individuals in their daily lives in order to determine the extent to which their behaviour patterns can be described as intelligent, researchers have developed tests involving problems whose solution demands a certain level of intelligence. This means that it is almost always the results of such tests - and hence category C - which are referred to when intelligence is discussed.

However, before bowing to this custom ourselves, it would be useful to note that intelligence takes on many very different forms. Specialists talk of verbal, spatial, practical, mechanical, social and other forms of intelligence, and several researchers have studied its component elements and structure (eg Guilford 1967; Carroll 1993). This is a useful reminder that intelligence is not a unitary concept. It should also warn us against reducing the concept of intelligence to theoretical or abstract intelligence of the kind most usually measured in intelligence tests. This is all the truer since it may be assumed that

language, as an instrument of communication, depends more on the practical, tangible and social aspects of intelligence.

As far as foreign language learning at school is concerned, however, many studies have shown the existence of a positive correlation with intelligence, but also that this link is relatively weak and subject to significant variations (cf Bo'gaards 1988: 45). These large variations cannot be explained by differences in methods or objectives as suggested by Carroll (1962: 89). Rather, it would seem that it is the school context itself, with its teaching, explanations and examinations, which demands intellectual effort from the pupils. It would be interesting to know how these intellectual demands could be reduced so as to give free rein to language learning mechanisms.

Indeed, there is a steadily growing belief that the human mind is modularised, ie made up of highly specialised modules, one of which is specifically designed for language learning. Munsell, Rauen and Kinjo (1988: 263) reach the provisional conclusion that "the functions of language are not normally acquired as general knowledge, as a set of habits, or via analysis or study, but rather that the mind has very specialized modules specifically wired for language use and acquisition". The same authors believe that the question which should be of greatest concern to foreign language teachers is that of how to reach and activate the parts of the mind specifically designed for language functions. As they point out, we are still a long way from knowing exactly "what our students most pay attention to, most like or most benefit from" (p 274).

More recently, cognitive psychology has made progress with the study of the human memory. Links have, for instance, been discovered between the "working memory" (Baddeley 1986) and some forms of intelligence (cf De Jong & Das-Smaal 1995). It has also been noted that cognitive styles, ie the particular ways in which individuals process and organise information inputs, are independent of intelligence and present specific features as regards foreign languages (Riding & Pearson 1994). Everything would seem to suggest that the questions concerning the significance of intelligence in relation to foreign language learning at school may look completely different in around ten years' time.

1.2 Social class

The concept of a learner's social class is not the same type of characteristic as his or her intelligence. While learners possess certain forms of intelligence, they belong in some way to one or other social class. Two types of question arise here: how, ie in what terms, can the various classes be defined, and what can be said about individuals belonging to specific classes?

As a general rule, social stratification depends on socio-economic factors. Individuals are classified according to their qualifications, occupations and earnings. Usually, only the characteristics of heads of families are taken into account, but the importance of those of their spouses is now gaining increasing recognition (Kalmijn 1994, but cf Baxter 1994). As many studies deal with teenage learners, it is, however, doubtful whether criteria of this kind are relevant to language learning. In addition, while individual learners may very well belong to a particular social class, this in no way proves that they subscribe to its standards or values. They may choose to learn a foreign language for the very purpose of escaping from their own background. In other words, it is better to try and describe learners' subjective perceptions of their social class.

If we refuse to see social class in a deterministic way and to regard learners as mere products of their backgrounds, our aim must be to establish the importance of foreign languages for them and to identify the factors which influence their attitudes. It is

here that another factor, namely age, comes into play. Children up to about the age of ten mainly see their parents as their role models. However, teenagers and, especially, young teenagers tend to turn to their peer groups for their values. This implies that neither parents nor (still less) teachers would seem to be in a position significantly to influence secondary school pupils' perceptions of foreign languages. It will therefore be important to consider young people's views in this area and to examine the ways in which ideas are transmitted within peer groups.

1.3 Social context

Two aspects of the social context would appear to be important with regard to learning foreign languages: the standing of the languages concerned and their presence in the learners' daily lives.

As regards the first point, depending on the social context, learning one or more foreign languages may be regarded as normal or exceptional, desirable, undesirable or unavoidable or difficult to achieve, etc. It goes without saying that the effect which each of these situations has on the individual learner differs greatly and that the standing of the languages learned varies accordingly. If learning a language of a low standing is both undesirable and unavoidable for an individual, we can only fear for the success of the learning process. If, however, an individual learner can improve his or her position merely by being able to mumble a few words in a language which is held in high regard, the situation will be entirely different. People usually learn - or are taught - specific languages because of their various characteristics: one language may be regarded highly because of its aesthetic or logical qualities, and another because it is useful; language X may be held to be very difficult, while command of language Y may offer the learner some advantage.

As far as the presence of foreign languages in everyday life is concerned, a distinction is usually made between learning second languages and learning foreign languages. Whereas, in the first case, the language learned is commonly used as a communication medium in the learners' immediate environment, in the second, it is rarely encountered outside the classroom. Although modern communications media and other factors mean that the latter case is relatively rare, it is useful to note the differences between the two situations. They seem to concern three levels:

- the possibilities for frequent and lasting contacts with speakers of the target language;
- the type of language facing the learner, this being academic and formal in the case of foreign languages and varied and informal in the case of second languages;
- the learners' immediate needs, which are practical and urgent in the case of total immersion and theoretical and non-urgent in the case of foreign languages learned at a distance.

Given that the social context can hardly be changed and that two different contexts cannot really be compared, it is virtually impossible to measure their influence. Very recently, however, research has begun on the comparative advantages of the two types of context, involving comparison of groups of learners who study foreign languages in their own country and groups who travel abroad to study. The findings here are not yet conclusive: while it is clear that the opportunities for contact with the target language enable learners who travel abroad to acquire valuable skills, in particular a certain ease of expression, specific communication techniques or more natural pronunciation, no studies

have demonstrated the existence of significant differences between the two categories (cf Freed 1995).

It is perhaps worthwhile drawing attention here to the studies under way at present in the universal grammar project, where questions are being raised about the respective roles of explicit teaching and of unstructured exposure to the target language: is explicit teaching an important or, indeed, essential factor in the effective acquisition of another language, or does everything depend on the contacts the learners have with that language in real situations? As the theoretical and experimental data gathered to date are still very varied, these questions remain open (cf Ellis 1994).

When discussing the social context, it is important not to forget the significance of the school context. As the structure of the education system can, in theory, be adjusted at national or regional level, it would be interesting to see what impact different structures have on pupils' achievements. The same is true of the choices made in terms of schools or even individual classes. Unfortunately, only very little is known about the significance of factors of this kind.

2. Measurable effects

We have seen that the factors discussed in the previous section differ greatly in nature. It is therefore hardly surprising that the effect they are thought to have on success in language learning also varies greatly. To sum up the above very briefly, it could be said that:

- *intelligence*, as an intrinsic characteristic of the learner, could have a direct effect on the learning process and hence on the results achieved;
- *social class*, defined as the whole set of values subscribed to, could influence the learner's attitudes, thus having only an indirect effect on the results;
- as the influence of the *social context* can be measured only in relation to other contexts, this element should be seen primarily as a situational parameter and not as a contributory factor; in other words, it is important properly to describe the learning situation, but the concept of social context is of little use in a theory intended to explain the pupils' results.

It has already been suggested several times that the three factors discussed so far are not alone in having a potential impact on success in language learning. For around thirty years, researchers have been attempting to group together, as far as possible, all the factors involved in the process of language learning at school and to determine their place and relative importance. In the sixties, Carroll (1962, 1963) proposed a school learning model which distinguished between teaching variables and personal variables (intelligence, ability, motivation). The main problem with this model lies in the fact that all the variables have to be expressed in a central value, ie time, which results in somewhat involved calculations (cf Bogaards 1988: 149 et seq).

More recently, other models have been put forward by authors such as Burt and Dulay (1981) and Stern (1983; for a model not specifically designed for foreign languages, see MacAulay, 1990). As can be seen in Appendix 1, Stern sets out a fairly large number of factors, which he divides into four groups: context, presage, process and product. This model is interesting insofar as it clearly demonstrates the complexity of the process of learning foreign languages. It has to be said, however, that it is too broad and too many aspects are left rather vague. For instance, the learner characteristics and teacher characteristics are not specified, and only a few items are indicated under learning conditions. Moreover, Stern shows only two types of relationship: direct influence and

feedback. For instance, the model shows the social context having a direct influence on teacher and learner characteristics and on learning conditions, and the learning process having a direct influence on the learning outcomes. It is questionable, however, whether the same type of relationship is involved in all of these cases.

In Bogaards (1988), I suggested a model incorporating four types of relationships (see Appendix 2), ie:

- *direct influence* (indicated by continuous lines): intelligence and attitude are assumed to have a direct influence on the outcomes, ie the latter are to some extent determined by these factors or, in other words, differences in intelligence levels lead to differences between individual learners' achievements;
- *interdependence* (indicated by dashed lines): the teaching itself cannot determine the learners' intelligence, but must adapt to it, while the pupils' intelligence must offset any inadequacies in the teaching or the explanations given by the teacher;
- *qualitative influence* (indicated by dotted line): this only concerns the teaching activities and the learning outcomes. Of course, the teaching does not determine the learners' individual results, but it does determine their nature: the objectives and methods which the teacher chooses determine the type of success the pupils can achieve.
- *feedback*: for the sake of greater clarity, no feedback relationships have been indicated in the model in Appendix 2. Nevertheless, there are many links of this kind and their role is significant. For instance, it is known not only that attitude has a crucial impact on outcomes, but also that outcomes themselves can reinforce positive or negative attitudes. Similarly, not only do teachers' expectations in respect of their pupils' ability have an influence on the pupils' perceptions of the learning process, but the actual outcomes are also bound to have an effect on what teachers expect from their classes or from individual pupils.

This model attempts to describe the relevant factors and their place in the process of learning foreign languages, as well as the internal relationships between them. The learning process is assumed to take place in a clearly defined situation, which it is hoped to describe as exhaustively as possible. This situation involves a meeting between the learner, who plays the leading role insofar as he or she does the learning or otherwise, and the teacher, who plays a secondary role insofar as he or she can only try to optimise the learning conditions.

Bibliography

(...)

Appendix 1

(...)

Appendix 2

Model of the factors which determine success in foreign language learning at school

		(Learner)	
	Intelligence	Previous knowledge	
(Teacher)		of languages	
	Personality		Outcome
	Sex	Attitude	
Teaching	Age		

activities
Expectations Background
Relationship
with class
Sex

(Situation)

(...)

Questions regarding

Intelligence, social class and social context - measurable effects on success in foreign language learning at school

(Paul Bogaards)

1. What types of intelligence are or should be important as regards foreign language learning at school? Is it possible to make language learning less dependent on intelligence?
2. To what extent are foreign languages "normal" school subjects?
3. How can we influence the attitudes of teenagers who have to learn one or more foreign languages?
4. Is school the best place for stimulating effective learning of foreign languages?
5. Would it be desirable for foreign languages to be more present in our daily lives? How could this be achieved?
6. How complete/realistic/useful are the models presented at the end of this contribution?

Summary of

Intelligence, social class and social context - measurable effects on success in foreign language learning at school

Paul Bogaards

University of Leiden (Netherlands)

Intelligence is an inherent characteristic of the learner. Although many studies show a positive correlation between intelligence (in the form of IQ) and the learning of foreign languages at school, it is unclear what type of intelligence is actually involved in the process of language learning.

Social class should be interpreted as the whole set of values subscribed to by the learner. These have a direct effect on his or her attitudes and hence on the results achieved.

It is difficult to influence the social context, but it needs to be described in detail.

In addition to these three factors, other elements have a direct or indirect effect on pupils' success in learning languages. Several models are presented.

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Annexe 1

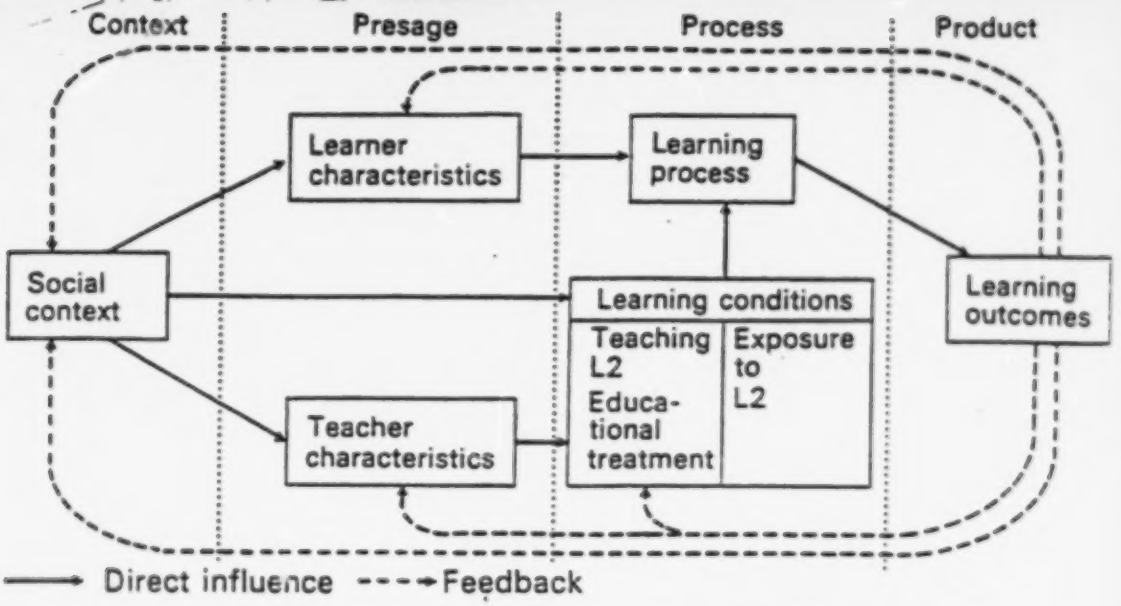

Figure 22.2 A teaching-learning model

Annexe 2

Figure 6.2. : Modèle des facteurs déterminant le succès en Lé à l'école.